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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,125	10/17/2003	Jonathan N. Howarth	SU-7155-C	2030
7982	7590	01/26/2007		
EDGAR SPIELMAN ALBEMARLE CORPORATION 451 FLORIDA BLVD. BATON ROUGE, LA 70801			EXAMINER LEVY, NEIL S	
			ART UNIT	PAPER NUMBER
			1615	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/26/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/688,125	Applicant(s) HOWARTH ET AL.	
	Examiner NEIL LEVY	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 9-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-13 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/15/04;3/31/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 1615

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of GROUP I in the reply filed on 10/26/06 is acknowledged. The traversal is on the ground(s) that Searching is not a serious burden.

This is not found persuasive because Search and examination of the article and composition of matter do pose a serious burden to comprehensive search and examination.

The requirement is still deemed proper and is therefore made FINAL.

Claims 9-13 STAND withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10/26/06

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

Art Unit: 1615

Claim1-4, 6 and 8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over SMITH 4925866

The instant DBDMH, preferred by SMITH (column 6, line 29) is added to water that contacts biofilm (column 7, lines 35-61) as indicated by growth of unwanted organisms now removed more effectively than by bleach (column 8, lines 13-22) by applying through a dispenser (column 8, lines 25-28). The amount of DBDMH is maintained between 1-1500 ppm (column 7, top) thus permitting the instant range of free Cl effective to treat and maintain surfaces clog-free-free of biofilm (column 8, top). At example 1, 1ppm of BCDMH provided 0.6 ppm free Cl; thus at a rate of 1500 ppm, free Cl would be about 900 ppm. Claim 9 is to DBDMH; claim 4 is 1-1500 ppm. Example 1 shows how to determine the amount needed to treat. Although no comparison between DBDMH and BCDMH is shown, it is evident that the artisan could choose the most economical product to use.

Claim1-4, 6 and 8 rejected under 35 U.S.C. 102(e) as being anticipated HOWARTH US2003/0077365.

This publication has a priority date of 6/28/01, which predated applicant's CIP of 10/29/01.

At [0052] we see the instant method. Granules are of the instant claim 7 form [0036, 0037, 0040, 0041] and provide the instant claim 6 free Cl.

Claim1-3, 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated HOWARTH et al WO02/062141.

Instant claims 1, 2 are recited at [page 3, line25; page 4, line 33; page 5, lines 15-23. Example 2 used a dispenser. Granule particle size is at page 15.

Claims 1-4,8 are rejected under 35 U.S.C. 102(a) as being anticipated by NALEPA et al 2002.

See Table 1; DBDMH is more effective than BCDMH in biofilm control. Free Cl is greater for the equimolar DBDMH to BCDMH (Table 7).

Art Unit: 1615

Claims 1-4, 7, 8 are rejected under 35 U.S.C. 102(a) as being anticipated

HOWARTH and NALEPA-2001

Comparison of DBDMH and BCDMH showed superior results and less consumption required of the DBDMH (page 5, 6). DBDMH granules were of the instant form (page 4).

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over SMITH in view of PRICE et al 5476116 and NALEPA et al 2002.

SMITH (above) shows DBDMH is effective to control bacteria, algae, and the biofilm coatings thereof at levels of the instant invention, SMITH also shows test protocols to determine comparative efficacy between sanitizing compounds. SMITH did not specify floating dispenser. PRICE does (summary) permitting precise control of halogen source, whatever it is (column 11, lines 8-25). One would be well motivated to use this device to deliver SMITH DBDMH granules where water tank operation was desired.

NALEPA is cited to show superiority of DBDMH, thus given SMITH's options, one would select the DBDMH in order to provide superior results, lower cost, or less use of product.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made desiring to utilize disinfection & biofilm control means, to use any of art recognized means, as of the Smith granules chosen as desired to increase stability, dispersibility, compatability of ingredients, increased efficacy & reduced cost.

Art Unit: 1615

The amounts and proportions of each ingredient are result effective parameters chosen to obtain the desired effects. It would be obvious to vary the form of each ingredient to optimize the effect desired, depending upon the particular water treatment and application method of interest, reduction of toxicity, cost minimization, enhanced, and prolonged effects.

Applicant has not provided any objective evidence of criticality, nonobvious or unexpected results that the administration of the particular ingredients' or concentrations provides any greater or different level of prior art expectation as claimed, and the use of ingredient for the functionality for which they are known to be used is not basis for patentability.

Double Patenting

Claim 1-6, 8 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-6, 9, 14, 15-22, 24, 26, 29, 31 of U.S. Patent No. 6565868.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are anticipated by the claims to DBDMH permitting of the same effects.

Claims 1, 2, 8 ARE rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6641828. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are anticipated by the claims to DBDMH permitting of the same effects.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

Art Unit: 1615

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NEIL LEVY whose telephone number is 571-272-0619.

The examiner can normally be reached on Tuesday-Friday, 7 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL WOODWARD can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



NEIL LEVY
Primary Examiner
Art Unit 1615